

# WARNING!

## Tree Work Can Be Deadly

In New Jersey, 32 workers died during tree removal or trimming activities between 1991 and 2003. Many others have been injured working on trees. Thirteen of the fatal injuries resulted from falls and 11 were the result of being struck by trees or tree branches. Six workers were electrocuted and two were fatally injured by chipping machines. New Jersey Department of Health & Senior Services investigations into the factors surrounding these fatalities showed that each one could have been prevented if proper work practices had been followed.

### Falls



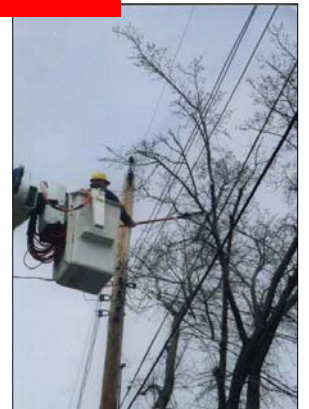
A tree worker tied himself off, with a lanyard, to a branch at a height of 60 feet in a tree that was to be taken down. He anchored his climbing line to the trunk of the tree, leaving an excess amount of slack. He straddled the branch facing outward and made two cuts in front of him. After the second cut, the branch fractured at the trunk, behind the worker. He fell freely for 20 feet, attached to the branch by his lanyard, before the slack in his climbing line was taken up and stopped his fall. His climbing line then snapped from the strain and he fell 40 feet to a concrete driveway.

- ▶ Use appropriate fall prevention methods when working in trees.
- ▶ Position climbing lines so the worker cannot free-fall to a lower level.
- ▶ Check the condition of tree branches before climbing on them.
- ▶ Inspect the condition of climbing lines and other equipment prior to each use.

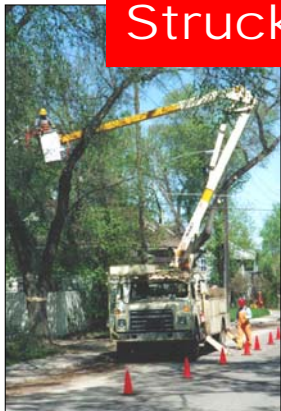
### Electrocutions

A 22-year-old tree trimmer was electrocuted while working near a power line. He and a groundman were assigned to remove a dead 45-foot tree that had power lines running between the branches. He planned to trim the branches on the side of the tree near the wires before removing the tree. He died when his hands contacted a power line that carried 220 volts of electricity.

- ▶ The employer and worker should check the tree for safety hazards, including power lines.
- ▶ Workers and equipment must be at least 10 feet from energized power lines unless the worker is a qualified line clearance arborist and uses appropriate equipment.
- ▶ The employer should notify the utility company if work must be done within 10 feet of an energized power line.



### Struck by Falling Object



A crew leader worked from an elevated aerial lift while a 47-year-old laborer hauled brush to a chipping machine. After he returned from break, the leader resumed work and told the laborer to stay away from the tree. He cut a trunk section 3 feet long and 14 inches in diameter and pushed down on it at a height of 50 feet. Unknown to him, the laborer had walked under the tree and was struck by the falling tree section.

- ▶ Clearly mark the work zone boundaries (for example, with cones or safety tape).
- ▶ Establish clear methods of communication between workers at the job site.
- ▶ The worker in the tree (or aerial lift) must give clear warnings to the ground crew.
- ▶ The ground crew must acknowledge that the warning was received.

- ✓ **Plan the job**
- ✓ **Inspect the tree\* and climbing equipment for defects before each job**
- ✓ **Ensure that you and your workers are trained**
- ✓ **Don't take shortcuts!**

\* A certified tree expert or arborist can be consulted to assess the tree and its environment (see back of page for contact information).

**Need more information?**  
See back of page for resources.



Richard J. Codey  
Acting Governor

New Jersey Department of Health & Senior Services  
Occupational Health Service  
Occupational Health Surveillance Program  
Fatality Assessment & Control Evaluation (FACE) Project  
PO Box 360, Trenton NJ 08625-0360  
(609) 984-1863  
[www.nj.gov/health/eoh/survweb/face.htm](http://www.nj.gov/health/eoh/survweb/face.htm)



Fred M. Jacobs, M.D., J.D.  
Commissioner

# Standards of Practice

## **American National Standards Institute (ANSI)**

ANSI Z133.1-2000. Standard for Tree Care Operations -- Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush -- Safety Requirements

[www.ansi.org](http://www.ansi.org)

## **Occupational Safety and Health Administration (OSHA) standards:**

- ▶ 29 CFR 1910.137 Electrical Protective Equipment
- ▶ 29 CFR 1910.268 Telecommunications
- ▶ 29 CFR 1910.269 Electric Power Generation, Transmission, and Distribution
- ▶ 29 CFR 1910.333 Selection and Use of Work Practices

[www.osha.gov](http://www.osha.gov)

# Resources

## **NJ Board of Tree Experts**

### **Committee for the Advancement of Arboriculture**

370 E Veterans Highway

Jackson, NJ 08527

732-833-0500

[www.njparksandforests.org/forest/community/cte.html](http://www.njparksandforests.org/forest/community/cte.html)

## **The International Society of Arboriculture (ISA) and its professional affiliates**

PO Box 3129

Champaign, IL 61826-3129

217-355-9411

[www.isa-arbor.com](http://www.isa-arbor.com)

### **New Jersey ISA Chapter**

629 Bryant St

Rahway NJ 07065

732-574-9100

## **Tree Care Industry Association (formerly the National Arborist Association)**

3 Perimeter Rd, Unit 1

Manchester, NH 03103

1-800-733-2622 or 603-314-5380

[www.natlarb.com](http://www.natlarb.com)

## **U.S. Department of Labor,**

### **Occupational Safety and Health Administration (OSHA)**

– enforces OSHA standards in the private sector

#### **New Jersey area offices:**

- ▶ Hunterdon, Middlesex, Somerset, Union, and Warren counties: 732-750-3270
- ▶ Bergen and Passaic counties: 201-288-1700
- ▶ Atlantic, Burlington, Cape May, Camden, Cumberland, Gloucester, Mercer, Monmouth, Ocean, and Salem counties: 856-757-5181
- ▶ Essex, Hudson, Morris, and Sussex counties: 973-263-1003

## **New Jersey Department of Environmental Protection**

### **Division of Parks and Forestry**

609-292-2532

[www.nj.gov/dep/parksandforests/forest](http://www.nj.gov/dep/parksandforests/forest)

## **New Jersey Department of Labor and Workforce Development**

### **Office of Public Employees' Occupational Safety & Health**

– enforces OSHA standards in the public sector

609-633-3896

[www.nj.gov/labor/lsse/lspeosh.html](http://www.nj.gov/labor/lsse/lspeosh.html)

## **Centers for Disease Control and Prevention**

### **National Institute for Occupational Safety and Health (NIOSH)**

### **Fatality Assessment and Control Evaluation (FACE) Program**

1-800-356-4674

[www.cdc.gov/niosh/face](http://www.cdc.gov/niosh/face)

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The New Jersey Department of Health & Senior Services, in conjunction with the National Institute for Occupational Safety and Health is conducting a research study of fatal work-related injuries. This project, known as FACE (Fatality Assessment and Control Evaluation), seeks to identify the factors that contribute to occupational injuries. The FACE study will help in the development and use of improved safety measures for preventing injuries.

We hope you find this bulletin useful and that you will share it with others. If you have any comments or questions, or need additional copies of this bulletin, please call the FACE Project at (609) 984-1863.

**Visit us on the Web!**

[www.nj.gov/health/eoh/survweb/face.htm](http://www.nj.gov/health/eoh/survweb/face.htm)